



Eating behaviors in individuals over the age of 18 years who applied to a family health center and the associated factors

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■ MAIN POINTS

- The present study revealed elevated levels of emotional eating among participants, whereas other eating behaviors were moderate.
- The EBQ scores were notably higher in older adults, married individuals, those without children, high-income groups, and participants with chronic illnesses or physical disabilities.
- Significant positive correlations were identified between AEBQ scores and factors such as age, number of children, duration of illness and disability, and BMI.
- Furthermore, both the illiterate and highly educated groups exhibited significant variations in the AEBQ scores.
- These results underscore the multifaceted influence of demographic variables on eating behaviors among adults.

■ ABSTRACT

Aim: This study aimed to determine the eating behaviors of individuals over the age of 18 years who applied to a family health center as well as the associated factors.

Materials and Methods: This cross-sectional study included 1,684 adults aged 18 years who attended two Family Health Centers in Elazığ, Turkey. Participants voluntarily completed a questionnaire, including sociodemographic items and the AEBQ, through face-to-face interviews. Ethical approval was obtained from the Ethics Committee of the Non-Interventional Clinical Trials. Statistical analyses, including t-tests, analysis of variance, Pearson correlation, and multiple linear regression, were used to examine associations between eating behaviors and sociodemographic and health-related factors.

Results: The participants' emotional eating (EE) scores were high, whereas the other AEBQ subscale and total scores were moderate. Higher AEBQ scores were observed in individuals aged ≥ 55 years, married, childless, with higher income, with chronic diseases, or with physical disabilities. Positive correlations were found between age, number of children, chronic disease duration, physical disability duration, BMI, and AEBQ scores.

Conclusion: The study demonstrates significant associations between sociodemographic and health-related factors and EEBs. These findings support the need for further research using the AEBQ and may guide interventions to promote healthier eating habits and improve the health of the population.

Keywords: Eating behaviors, Eating behavior factors, Family health center

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■ INTRODUCTION

As one of the most basic human needs, nutrition is important for protecting and promoting health and enhancing the quality of life [1]. Individuals' nutritional needs vary according to age, gender, physical activity intensity, disease condition, and genetic structure [2].

An energy deficit emerges if the daily energy intake is less than the total energy consumed. The lower daily energy intake may be due to reasons such as consciously or unconsciously unbalanced and inadequate nutrition, abnormal eating behaviors, and the inability to meet the energy requirement due to energy intake restriction [3].

Behaviors related to eating habits are established over time and are affected by both psychosocial and social factors [4]. Many factors affect food choice, including age, habits, educational level, accessibility, environment and ethics, body weight control, perceived stress level, genetics, nutritional knowledge, physical activity level, and concern about good health [5]. These factors, which we refer to as personal characteristics and environmental factors, may cause eating behavior disturbances [6].

The gradual increase in obesity all over the world is an important issue for us to question the eating habits of adults [7]. Obesity is a health problem that negatively affects psycholog-

ical and physical health and leads to an elevated mortality rate [8]. Overeating and reduced physical activity are causes of weight gain [9].

Eating behavior may also show different trends when affected by individuals' sociopsychological state. These include eating behavior disorders such as emotional eating, external eating, and restrictive eating [10]. Emotional Eating can be described as a response to emotions such as joy, stress, and sadness by referring to food. External Eating refers to eating in response to external stimuli such as the smell and presentation of food, even though one is not hungry. Restrictive eating is defined as excessive restriction of food intake due to anxiety about weight gain [11].

This study aimed to determine the eating behaviors of individuals over the age of 18, identify the factors affecting eating behaviors, examine these factors, and make recommendations for regulating the eating behaviors of individuals.

■ MATERIALS AND METHODS

Data analysis

This study was conducted using a cross-sectional method with quantitative data. Quantitative research is conducted within the positivist paradigm framework and emphasizes the use of probabilistic sampling methods in large populations and samples [12]. This study employed an observational model, a type of quantitative method, and collected data through face-to-face interviews. The researchers informed the participants through the informed consent form attached to the questionnaire, which included the principles of the Declaration of Helsinki. The inclusion criteria of the study were voluntary participation and registration in the FHC. The exclusion criteria were withdrawal from the study during or after the completion of the questionnaire. The study was completed with 1684 participants.

The research was conducted between May 31 and August 31, 2023, at Family Health Units No. 91 and No. 105 in the city center of Elâzığ. During the specified dates, 1292 and 958 patients presented to Family Health Unit No. 91 and 958 to Family Health Unit No. 105, making a total of 2250 applications. The study included all individuals aged 18 and over who volunteered to participate, and the research was completed with a total of 1,684 individuals. This number corresponds to approximately 75% of adult applicants during the study period. In descriptive cross-sectional studies, when a very large portion of the universe is reached, calculating a minimum sample size is unnecessary [13].

The questionnaire form used in the study consists of two sections: The first part of the form contains the Individual Information Form, which includes questions about sociodemographic characteristics such as age, gender, marital status, educational level, health conditions such as diseases and allergies, and questions that investigate the attitudes and behaviors of the participant toward eating habits. The second part of the form is the "Adult Eating Behavior Questionnaire (AEBQ)."

The dependent variable of the study is the total score and subscale scores of the AEBQ. The independent variables were sociodemographic and health-related characteristics, such as age, gender, marital status, education level, parental status, occupation, perceived economic status, difficulty in accessing the health center, presence of a chronic disease, presence of a physical disability, height, weight, body mass index, number of main meals/snacks, dietary habits, and the number of healthcare service applications. The main hypothesis of the research is that these independent variables have significant effects on the AEBQ scores.

The original form of the AEBQ developed by Hunot et al. [14] in 2016 consists of 35 questions. Participants are expected to self-assess using a 5-point Likert-type response ranging from "Strongly agree" to "Strongly disagree." Accordingly, the minimum and maximum possible scores are 35 and 175, respectively. Higher scores indicate that individuals exhibit specific eating behaviors more prominently. Items in the AEBQ are classified on eight scales, four of which are food approach and four food avoidance scales. The scale has eight subscales: Enjoyment of Eating (EE), Emotional Over-eating (EO), Emotional Under-eating (EU), Food Fussiness (FF), Food Responsiveness (FR), Slowness in Eating (SE), Hunger (H), and Satiety Responsiveness (SR). The validity and reliability study conducted by Şengül et al. [15] reported Cronbach's alpha values as EE = 0.70, EO = 0.71, EU = 0.86, FF = 0.80, FR = 0.81, SE = 0.93, H = 0.77, and SR = 0.70 [15]. However, the Cronbach's alpha values in this study were found to be EE=0.78,EO=0.97,EU=0.97,FF=0.73,FR=0.89,SE=0.65, H=0.86,and SR=0.81. There is no cutoff value for the scale. Scale evaluation is based on eight subheadings and a total average score. In the validity and reliability study conducted by Yardımcı et al. in a similar manner, the descriptive statistics (mean $\pm$ SD), internal consistency (Cronbach's alpha), and test-retest reliability of the AEBQ-TR were also reported. Internal consistency demonstrated that the questionnaire had adequate reliability, with Cronbach's alpha coefficients exceeding 0.70 for all subscales except satiety responsiveness. Test-retest reliability was also above 0.70 (ranging between 0.95 and 0.98) for all subscales of the AEBQ-TR [16].

The Non-Interventional Clinical Trials Ethics Committee of the Gaziantep Islam Science and Technology University granted written approval before the study (approval no: 2023/214).

Statistical analysis

Analyses were conducted using a statistical software package and subsequently verified using R, an open-source and free software. Categorical data are expressed in numbers and percentages. For numerical data, a normality analysis was performed. To assess the applicability of parametric tests, the assumption of normality was examined using the Kolmogorov-Smirnov test, and the skewness (0.372) and kurtosis (1.032)

values were found to be within acceptable limits. The Levene test was used to evaluate the homogeneity of variances, and the assumption of homogeneity was met. Therefore, following the one-way analysis of variance, the Tukey HSD post hoc test was used to determine the source of the difference between the groups. Pearson correlation analysis, parametric analyses (independent sample t-test and one-way analysis of variance test), and multiple linear regression analysis were performed. The independent variables to be included in the analysis were selected from variables found to be significant in the univariate analyses in our study and from previous literature findings. Additionally, a check for multicollinearity was performed as the variables were entered into the model, and the VIF values were found to be <10 . A statistical significance level of $p < 0.05$ was set.

■ RESULTS

The average age of the participants was 39.45 ± 15.58 (min: 18, max: 84 years), and 44.7% were male. Table 1 shows the descriptive characteristics of the participants.

This study revealed that 6.1% of the participants reported their marital status as "other." Among respondents, 33.8% identified themselves as single, while 60.1% reported being married. The mean number of children was 2.64 ± 1.40 (min: 1, max: 8). 42.3% of the participants indicated their profession as "other," while 281 (39.1%) of them stated that they were employed in the private sector, 100 (13.9%) of them stated that they were retired, 82 (11.4%) stated that they were teachers; 72 (10.0%) stated that they were health workers; 66 (9.2%) stated that they were students; 53 (7.4%) stated that they were academicians, 23 (3.2%) stated that they were engineers, 23 (3.2%) stated that they were business owners, 13 (1.8%) stated that they were police officers, and 5 (0.7%) stated that they were pharmacists. The rate of those who reported having difficulty in accessing health services was 71.7%, 671 people (55.2%) stated that they could not make an appointment, 295 people (24.3%) stated that the number of queues at the hospital was too long, 142 people (11.7%) stated that transportation conditions were difficult, 100 people (8.2%) stated financial constraints, and 8 people (0.7%) stated physical disability as one of the reasons why they could not access services. The rate of participants with chronic diseases was 26.2%, and the mean duration of the disease was 10.93 ± 6.67 (min: 2, max: 40 years). The mean number of family physician visits in the last year was 2.69 ± 1.52 (min: 1, max: 10 times), while the mean number of hospitalizations in the last year was 3.02 ± 2.11 (min: 0, max: 15 times).

The mean height of the participants was 168.36 ± 9.53 cm (min: 150, max: 192 cm), their mean weight was 71.08 ± 9.78 (min: 48, max: 99 kg), and their mean body mass index was 25.13 ± 3.76 (min: 17.65, max: 39.55).

The mean number of main meals consumed by the participants per day was 2.32 ± 0.50 (min: 1, max: 4), and the mean number of snacks was 1.02 ± 0.82 (min: 0, max: 3). Almost

half of the participants skipped the main meal. Table 2 shows the nutritional characteristics of the participants.

As shown in Table 3, the participants' mean EE score was high. The mean scores of the other subscales and the AEBQ mean score were medium.

In the evaluation conducted to identify the general eating behaviors of adults, the mean total AEBQ score among participants aged 18 years and older was found to be 101.95 ± 11.66 . Among the subscales, the highest mean score was observed in the EE subscale (10.81 ± 2.08), while the lowest mean score was observed in the FR subscale (7.77 ± 2.91). These findings provide a descriptive overview of the study population's general eating behaviors (Table 3).

As shown in Table 4, the age range of the participants caused a difference in the distribution of AEBQ scores. The mean scores of those who were 55 years old and older were higher than those in the other two age ranges. This was highly significant ($p < 0.001$). The variable of sex did not cause a difference in the distribution of AEBQ scores. At the educational level, it was found that both illiterates and those who held a higher degree of education were statistically highly significant groups causing the difference ($p < 0.001$). Similarly, those who had no children ($p < 0.001$), those who earned more income ($p < 0.001$), those who suffered from chronic diseases ($p < 0.001$), and those who were physically disabled had higher AEBQ scores.

Table 5 shows the correlation between the characteristics of the participants and AEBQ. There was a statistically significant positive correlation between the participant's age, number of children, duration of chronic disease, duration of physical disability, and BMI values and their AEBQ scores, but these variables were very weakly correlated with a one-unit change in the AEBQ.

In this study, the model created to establish the variables affecting the AEBQ score was found to be significant ($p < 0.05$). The AEBQ score was predicted in terms of the variables of educational level, perception of income level, and having a physical disability. The level of education explained 1.14% of the 1 (one) standard deviation change in the AEBQ score, 0.49% by the perception of income level, and 2.07% by the presence of a physical disability. explained (Table 6).

Age, educational level, number of children, perceived income level, presence of chronic disease, and physical disability were identified as factors influencing eating behaviors. These variables were significantly associated with AEBQ scores, thereby indicating the factors affecting eating behaviors.

■ DISCUSSION

In this study, which was conducted to determine the eating behaviors of individuals over the age of 18 who applied to the family health center, the mean age of the participants was 39.45 ± 15.58 (min: 18, max: 84 years), and 44.7% were male. In a similar study by Şengül, it was reported that the mean age of the participants was 19.36 ± 1.70 [15].

Table 1. Some descriptive characteristics of the participants (N= 1684).

Characteristics		n	%
Age range	35 years and under	820	48.7
	Between 36-55 years	591	35.1
	55 years and over	273	16.2
Gender	Male	752	44.7
	Female	932	55.3
Marital Status	Married	1012	60.1
	Single	570	33.8
	Other (Widow/Divorced/Estranged)	102	6.1
Educational Level	Illiterate	38	2.3
	Literate	31	1.8
	Primary school	99	5.9
	Secondary school	135	8.0
	High school	601	35.7
	University	780	46.3
Having a child	Yes	652	38.7
	No	1032	61.3
Profession n (1679)	Civil servant	302	18.0
	Worker	139	8.3
	Farmer	23	1.4
	Self-employed	115	6.8
	Housewife	390	23.2
	Other	710	42.3
Perceptions of income status	Income more than expenses	334	19.8
	Income equal to expenses	697	41.4
	Income less than expenses	653	38.8
The status of having difficulty in accessing the health centre	Never	476	28.3
	Rarely	463	27.5
	Sometimes	523	31.1
	Usually	161	9.6
	Always	61	3.5
The status of having chronic disease	No	1243	73.8
	Yes	441	26.2
The status of having a physical disability	No	1671	99.2
	Yes	13	0.8

Table 2. Some nutritional characteristics of the participants (N= 1684).

Characteristics		n	%
Skipping main meals	No	904	53.7
	Yes	144	8.6
	Sometimes	628	37.3
	Often	8	0.5
Which meal do they skip the most?	Breakfast	337	20.0
	Lunch	409	24.3
	Dinner	49	2.9
	Don't skip any at all	889	52.8
Diet	Vegetarian	5	0.3
	Vegan	88	5.2
	Pescatarian	48	2.9
	Omnivorous	1543	91.6
Having a food allergy	Yes	41	2.4
	No	1643	97.6

In the present study, 60.1% of the individuals were married, 26.2% had a chronic disease, and 53.7% did not skip the main meal. In their study, Arslantaş et al. reported that 1.7% of

the participants were married, 14.9% had a chronic disease, and 75.1% had an eating habit of 3 or more meals per day [17]. While the present study shows similar characteristics to

Table 3. Scores of AEBQ and its subscales used in the study.

	Mean $\pm$ SD	Median	Min.	Max.	95% CI
EE	10.81 $\pm$ 2.08	11.00	3.00	15.00	10.71-10.90
EO	8.25 $\pm$ 3.42	9.00	3.00	15.00	8.08-8.41
EU	12.68 $\pm$ 4.38	12.00	4.00	20.00	12.47-12.75
FF	13.35 $\pm$ 4.12	14.00	5.00	25.00	13.16-13.55
FR	7.77 $\pm$ 2.91	7.50	3.00	15.00	7.63-7.91
SE	12.01 $\pm$ 4.64	12.00	4.00	52.00	11.79-12.24
H	12.73 $\pm$ 4.66	12.00	5.00	25.00	12.50-12.95
SR	12.15 $\pm$ 3.61	12.00	4.00	20.00	11.98-12.33
AEBQ	101.95 $\pm$ 11.66	102.00	73.00	145.00	101.39-102.50

REMARKS: EE; Enjoyment of Eating, EO; Emotional Over-eating, EU; Emotional Under-eating, FF; Food Fussiness, FR; Food Responsiveness, SE; Slowness in Eating, H; Hunger, SR; Satiety Responsiveness, AEBQ; Adult Eating Behaviour Questionnaire.

Table 4. The variables causing a difference on the distribution of AEBQ mean scores of the participants (N= 1684).

Characteristics	Variable	n	AEBQ Mean $\pm$ SD	Test values	Effect Size η^2
Age range	35 years and under	820	101.45 $\pm$ 12.41 ^a	F= 21.11 p= <0.001	0.012-0.040
	Between 36-55 years	591	100.74 $\pm$ 11.44 ^b		
	55 years and over	273	106.03 $\pm$ 8.52 ^{a,b}		
Gender	Male	752	102.26 $\pm$ 12.08	t= 0.990 p= 0.322	
	Female	932	101.69 $\pm$ 11.30		
Marital status	Married	1012	102.78 $\pm$ 11.26 ^{a,b}	F= 18.603 p= <0.001	0.010-0.037
	Single	570	99.76 $\pm$ 12.06 ^{a,c}		
	Other	102	105.82 $\pm$ 11.23 ^{b,c}		
Educational level	Illiterate	38	111.55 $\pm$ 10.65 ^a	F= 17.621 p= <0.001	0.030-0.069
	Literate	31	110.16 $\pm$ 5.17 ^b		
	Primary school	99	107.53 $\pm$ 6.51 ^c		
	Secondary school	135	98.37 $\pm$ 10.40 ^{a,b,c}		
	High school	601	102.23 $\pm$ 12.54 ^{a,b,c}		
Having a child	University	780	100.84 $\pm$ 11.29 ^{a,b,c}	t= -4.341 p= <0.001	-0.315-0.119
	Having a child	652	100.46 $\pm$ 12.18		
Profession n (1679)	Having no child	1032	102.92 $\pm$ 11.21	F= 30.234 p= <0.001	0.057-0.106
	Civil servant	302	104.46 $\pm$ 13.46 ^a		
	Worker	139	107.26 $\pm$ 9.89 ^{b,e}		
	Farmer	23	106.60 $\pm$ 8.92 ^c		
	Self-employed	115	103.56 $\pm$ 11.13 ^d		
	Housewife	390	103.92 $\pm$ 10.00 ^{e,f}		
Income status?	Other	710	98.12 $\pm$ 10.78 ^{a,b,c,d,f}		
	Income more than expenses	334	103.22 $\pm$ 12.61 ^a	F= 4.373 p= 0.013	0.000-0.013
	Income equal to expenses	697	101.04 $\pm$ 11.96 ^a		
Having difficulty in accessing the health centre?	Income less than expenses	653	102.27 $\pm$ 11.66		
	Never	476	98.70 $\pm$ 11.23 ^a	F= 39.544 p= <0.001	0.061-0.111
	Rarely	463	100.99 $\pm$ 10.77 ^{a,b}		
	Sometimes	523	102.39 $\pm$ 12.38 ^a		
	Usually	161	109.13 $\pm$ 7.84 ^{a,b}		
	Always	61	111.73 $\pm$ 9.58 ^{a,b}		
Chronic disease?	No	1243	101.16 $\pm$ 12.25	t= -4.678 p= <0.001	-0.368-0.150
	Yes	441	104.16 $\pm$ 9.44		
Physical disability?	No	1671	101.77 $\pm$ 11.52	t= -7.289 p= <0.001	-2.579-1.479
	Yes	13	125.07 $\pm$ 2.53		

REMARKS: a,b,c,d,e,f show the groups causing the difference and Tukey test was run. SD: Standard Deviation, AEBQ: Adult Eating Behaviour Questionnaire.

Arslantaş's study in some aspects, it also shows differences in some aspects; this difference is due to the population in which the studies have been conducted and the different population groups.

In the present study, the AEBQ mean score was 101.95 $\pm$ 11.66

(min: 73, max: 145 points), which was at a moderate level. The highest score was 13.35 $\pm$ 4.12, obtained in the FF subscale (95% CI: 13.16-13.55) and the lowest score was 7.77 $\pm$ 2.91, obtained in the FR subscale (95% CI: 7.63-7.91). In a similar study conducted by Yardımcı et al., it was reported that the

Table 5. The correlation of some characteristics of the participants and AEBQ (N= 1684).

		Age	Number of Children	Duration of chronic disease	Duration of physical disability	BMI
AEBQ	r	0.113**	0.111**	0.159	1.000**	0.263**
	p	<0.001	<0.001	<0.001	0.001	0.001

**Significant level at the level of 0.01, * at the level of 0.05.

Table 6. Some of effective characteristics on the AEBQ score.

	Stan.Coef. β	t	p	Subscale/Component	95% CI	VIF
Constant	91.243	19.102	<0.001		81.87-100.61	
Age	-0.197	-0.364	0.716	-0.009	-1.261-0.866	2.09
Marital status	-0.791	-1.461	0.144	-0.036	-1.852-0.271	1.41
Educational level	-1.420	-4.419	<0.001	-0.107	-2.050-0.790	1.74
Having a child	0.486	0.605	0.545	0.015	-1.090-2.063	2.00
Income	-1.336	-3.140	0.002	-0.076	-2.171-0.502	1.30
Chronic disease	1.365	1.570	0.117	0.038	-0.341-3.071	1.91
Physical disability	19.729	5.969	<0.001	0.144	13.246-26.212	1.09

AEBQ mean score was at a moderate level, the highest score was observed in the EE subscale, and the lowest score was observed in the EO subscale [16]. Mostafazadeh et al reported the highest score in the EE subscale and the lowest score in the EO subscale [18]. The results of the present study are similar to the study by Yardımcı et al., in terms of the AEBQ score, and the differences in scores in the subscales are thought to be caused by the different cultural structures and eating habits of the people of the different countries where the study was conducted.

In the present study, the AEBQ score of individuals aged 55 and over was significantly higher than that of individuals aged between 36 and 55 years and those aged 35 and under. In their study, Şengür et al found that the AEBQ score increased with increasing age. The results of this study are similar to those reported in the literature [19]. The AEBQ score is expected to increase with increasing age, as lifestyle and cultural changes acquired during adulthood are important factors on food preferences and nutrition.

In this study, no statistically significant difference was found in the AEBQ score according to gender. In their study, Yurt and Özdemir reported no significant difference [20]. Zulu et al. also found that although there was no significant difference between eating behaviors and gender, the scores of women were higher than those of men [21]. Kahraman et al found that the eating behavior score was statistically significantly higher in female students than in male students [22]. The difference between the present study and other studies supporting the present study and Kahraman's study is because Kahraman's study was conducted only among the young student population.

In the study, it was determined that the AEBQ scores of secondary school, high school, and university graduates were significantly higher than those of illiterate, literate, and primary school graduates. Mutlu et al observed that there was no statistically significant difference in terms of adult eating behav-

iors in terms of education [21]. This difference is thought to be due to the increase in the level of education and the fact that individuals' body perception and eating behaviors include restrictive and regulatory eating behaviors.

When the AEBQ score was evaluated from an economic perspective, the AEBQ score of those who stated that their income was more than expenses was found to be significantly higher than those who stated that their income was equal to and less than expenses. In the study by Tanriverdi et al., the eating attitude behavior scores of those who described their family's income status as very high were significantly higher than those who described their family's income status as middle or low [23]. It is expected that a high income level and the perception of having a high income level will increase the AEBQ score. The results of the present study are compatible with the literature results.

In the present study, the AEBQ score of married people was higher than that of single people, and the AEBQ score of other marital statuses (divorced and widowed) was higher than that of single and married people. Ceyhan's study found no significant correlation between marital status and eating behaviors [24]. This difference between the results of the present study and Ceyhan's study is thought to be due to the fact that Ceyhan's study was conducted among students and the number of married individuals was very low compared to single individuals. Single individuals are also thought to be at a higher risk of eating disorders, and due to their irregular lifestyle, they cannot pay much attention to their eating habits and have worse eating attitudes than married individuals.

The AEBQ score of those without children was higher than those who had children. This is one of the most important reasons why parents with children have a negative impact on their eating behaviors, as they have the concerns and worries of all family members as a whole due to the concept of family, in addition to their own individual responsibilities.

The AEBQ score of those with chronic diseases was higher than those without chronic diseases. In Ayaz's study, individuals with chronic diseases had higher eating attitude and behavior scores than those without chronic diseases [25]. Individuals with chronic diseases show more care and attention to their eating behavior because of the need to prevent further disease progression and to live a better quality of life. Therefore, it is important for individuals with chronic diseases to establish a more regular and careful eating behavior discipline for their own health stability.

The AEBQ score of those with physical disabilities was higher than those without. Disabled individuals behave in a more multidisciplinary manner on this issue because they believe that regular consumption of food and beverages, and therefore their eating attitudes and behaviors, are an indicator of being fully healthy.

When the correlation between some characteristics of the participants and AEBQ scores was examined, a positive correlation was observed between AEBQ scores and age, chronic disease duration, physical disability duration, and BMI. The AEBQ score is expected to increase as the BMI increases, as obesity is not only a problem in developed countries but also one of the most important public health problems in developing countries due to globalization. Similar results were obtained by Shinde et al. [26].

■ CONCLUSION

In this study, the participants' EE mean scores were high, and the mean scores of the other subscales and AEBQ were moderate. However, the AEBQ score was higher in individuals aged 55 and over than in the other age groups, married individuals compared to single individuals, and individuals without children than those with children. Those who had a high income, suffered from chronic diseases, and had physical disabilities also had high AEBQ scores. A statistically significant positive correlation was found between the participants' age, number of children, duration of chronic disease, duration of physical disability, and BMI values and AEBQ scores. The illiterate and those with advanced education were the groups that caused the difference. As the scale used in this study is new in the literature and has not been widely applied, increasing the number of studies using the AEBQ for the assessment of adult eating behaviors and expanding solution proposals based on the findings of these studies are recommended. In line with the first objective of the study, the eating behaviors of individuals over the age of 18 were examined, with participants showing high mean scores in EE and moderate scores in the other subscales. These findings provide an overview of the participants' general eating behavior profile and are expected to contribute to the development of healthier eating habits and healthier societies.

Ethics Committee Approval: Approval of the Ethics Committee of the Gaziantep Islam Science and Technology University

(protocol 2023/214, approval date: 02.05.2023) was taken for the study.

Informed Consent: Informed consent was obtained from all the subjects participating in the study.

Peer-review: Externally peer-reviewed.

Conflict of Interest: The authors declare no conflict of interest.

Author Contributions: Conception, E.A.; Design E.A.; Supervision, E.A.; and A.B; Fundings, E.A.; and A.B; Materials; E.A.; and A.B; Data Collection and/or Processing, E.A.; and A.B; Analysis and/or Interpretation, E.A.; and A.B; Literature Review, E.A; and A.B.; Writing, E.A; and A.B.; Critical Review, E.A; and A.B. All authors read and agreed to the published version of the manuscript.

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■ REFERENCES

1. Hacettepe University Department of Nutrition and Dietetics. Nutrition Guide Specific to Turkey 2004. Available at www.bdb.hacettepe.edu.tr/torehberi.pdf. Accessed July 21, 2023.
2. Baysal A. Impact of social inequalities on nutrition. *CMJ*. 2003;25(4): 66-72.
3. Mountjoy ML, Burke LM, Stellingwerff T, Sundgot-Borgen J. Relative energy deficiency in sport: the tip of an iceberg. *Int J Sport Nutr Exerc Metab*. 2018;28(4):313-315. doi:10.1123/ijsnem.2018-0149.
4. Ganasegeran K, Al-Dubai SA, Qureshi AM, Al-abed AA, Am R, Aljunid SM. Social and psychological factors affecting eating habits among university students in a Malaysian medical school: a cross-sectional study. *Nutr J*. 2012;11:48. doi: 10.1186/1475-2891-11-48.
5. Phan UT, Chambers E. Motivations for choosing various food groups based on individual foods. *Appetite*. 2016;105:204-211. doi: 10.1016/j.appet.2016.05.031.
6. Altınok M. The evaluation of eating attitudes, emotional eating, mindful eating and orthorexia with the metacognitions. Master's thesis, University of Fatih Sultan Mehmet Department of Psychology, Istanbul 2020.
7. Ng M, Fleming T, Robinson M, Thomson B, Graetz N, Margono C, et al. Global, regional, and national prevalence of overweight and obesity in children and adults during 1980-2013: a systematic analysis for the Global Burden of Disease Study 2013. *Lancet*. 2014;6736(14):1-16. doi: 10.1016/S0140-6736(14)60460-8.
8. Flegal KM, Kit BK, Orpana H. Association of all-cause mortality with overweight and obesity using standard Body Mass index categories. A systematic review and meta-analysis. *JAMA*. 2013;309(1):71-82. doi: 10.1001/jama.2012.113905.
9. Llewellyn CH, Wardle J. Behavioral susceptibility to obesity: gene-environment interplay in the development of weight. *Physiol Behav*. 2015;152(Pt B):494-501. doi: 10.1016/j.physbeh.2015.07.006.
10. Johnson F, Pratt M, Wardle J. Dietary restraint and self-regulation in eating behaviour. *Int J Obes*. 2012;36(5):665-674. doi: 10.1038/ijo.2011.156.
11. Bayrak E, Serter R, Isikli S. The effect of emotional, external and restraint eating disorders on the development of metabolic syndrome. *Med J Ankara Train Res Hospital*. 2020;53(1):36-43. doi: 10.20492/aeahrd.669570.

12. Garip S. A Theoretical Study on the Quantitative Research Tradition in Social Sciences. *IJSSR*. 2023;12(1):1-19.
13. Aktürk, Z., Acemoğlu, H., Akçay, F., & Işık, M. Sağlık çalışanları için araştırma ve pratik istatistik: Örnek problemler ve SPSS çözümleri. Ankara: Akademisyen Kitabevi. 2016.
14. Hunot C, Fildes A, Croker H, Llewellyn C, Wardle J, Beeken R. Appetitive Traits and relationships with BMI in adults: Development of the adult eating behaviour questionnaire. *Appetite*. 2016;105:356-363. doi: [10.1016/j.appet.2016.05.024](https://doi.org/10.1016/j.appet.2016.05.024).
15. Sengül H. University students eating behavior scale: validity and reliability study. *Ejons J*. 2020;4(15):708-721. doi: [10.38063/ejons.316](https://doi.org/10.38063/ejons.316).
16. Yardımcı H, Ersoy N, Aslan Cin NN. Validity and reliability of Turkish version of the Adult Eating Behaviour Questionnaire for adult participants. *Public Health Nutrition*. 2023;26(11):2218–2225. doi: [10.1017/S1368980023001751](https://doi.org/10.1017/S1368980023001751).
17. Arslantas H, Adana F, Oğut S, Ayakdas D, Korkmaz A. Relationship Between Eating Behaviors of Nursing Students and Orthorexia Nervosa (Obsession with Healthy Eating): A Cross-Sectional Study. *The Journal of Psychiatric Nursing*. 2017;8(3):137–144. doi: [10.14744/phd.2016.36854](https://doi.org/10.14744/phd.2016.36854).
18. Mostafazadeh P, Jafari MJ, Mojebi MR, Nemati-Vakilabad R, Mirzaei A. Assessing the relationship between nutrition literacy and eating behaviors among nursing students: a cross-sectional study. *BMC Public Health*. 2024;24(1):18. doi: [10.1186/s12889-023-17468-9](https://doi.org/10.1186/s12889-023-17468-9).
19. Sengür E, Yılmaz G, Turasan I. Examination of Eating Behaviors of Students Studying in Sports Sciences Faculties of Universities. *Journal of Sports Education*. 2023;7(3):257-265. doi: [10.55238/seder.1373290](https://doi.org/10.55238/seder.1373290).
20. Yurt S, Özdemir T. Determination of Nutrition Exercise Behaviors of University Students. *JERN*. 2020;17(3):238-243. doi: [10.5222/HEAD.2020.58234](https://doi.org/10.5222/HEAD.2020.58234).
21. Gökensel Okta P, İnce N, Akyol Mutlu A. Determination of Eating Behaviors of Volleyball Players. *Research in Sport Education and Sciences*. 2022;24(3):87-92. doi: [10.5152/JPESS.2022.22714](https://doi.org/10.5152/JPESS.2022.22714).
22. Kahraman S, Çiftçi EK, Yılmaz D. Comparison of nutritional habits of the nursing and faculty of economics students. *IAAOJ Health Sciences*. 2020;6(3):302-314.
23. Tanrıverdi D, Savaş E, Gönüllüoğlu N, Kurdal E, Balık G. Determination of High School Students' Eating Attitudes, Eating Behavior and Self-Esteem. *Eur J Therapeutics*. 2011;17(1):33-39. doi: [10.58600/eurjther.2011-17-1-749-arch](https://doi.org/10.58600/eurjther.2011-17-1-749-arch).
24. Ceyhan H. The Relationship Between Eating Behaviors of Health Sciences Students with Anthropometric and Sociodemographic Features. Master's thesis, University of Istanbul, Istanbul 2021.
25. Ayaz A. Researching the eating attitudes and mindful eating of individuals aged 18-65. Master's thesis, University of Istanbul Medipol, Istanbul 2021.
26. Shinde VV. Relationship of body mass index to job stress and eating behaviour in health care professionals-an observational study. *Obes Med*. 2019;14:100070. doi: [10.1016/j.obmed.2018.12.002](https://doi.org/10.1016/j.obmed.2018.12.002).